LABTECH Realtime VISIONpro - ser 27		
	◯▱炎 Qi≢ ≫ ●	
0 20 40 60 80 100 120 140 160 180 PARTICULATE ALARM SET POINT IN Big 1	Bq1 140.00	ALARM SET POINTS ALL ALARM SET POINTS ARE SET HERE.
IODINE ALARM SET POINT IN Bg1 0 100 NOBLE GAS ALARM SET POINT IN KBg1	200 Bg1 37.00	PARTICULATE, IODINE AND GAS. TOTAL PARTICULATE, IODINE AND GAS. STACK FLOW FACTOR.
0 20000 40000 50000 80000 TOTAL PARTICULATE ALARM SET POINT IN Bq 0 20000 40000 50000 80000 TOTAL IDDINE ALARM SET POINT IN Bq	Bq1 37000.00 100000 Bq1 37000.00	CHANGE THE SETTINGS USING THE SLIDER'S OR BY HOLDING THE SHIFT KEY AND DOUBLE CLICKING ON THE SLIDER. A KEYPAD DIALOG WILL APPEAR, ENTER THE DESIRED VALUES
0 20000 40000 60000 80000 TOTAL NOBLE GAS ALARM SET POINT IN KBQ	Bg1 37090.00	THEN CLICK THE "ENTER" ON KEYPAD TO ACCEPT THE VALUES.
0 500 PARTICULATE EMERGENCY	1000 Bq1 494.87	THE STACK FLOW FACTOR WILL BE USED TO CALCULATE THE TOTAL FLOW THROUGH THE STACK, BY EACH CHANNEL.
0 500 HODINE EMERGENCY	Bg1 8719.66	SFF. 3.15
		0 40 80 120 160 200 STACK FLOW FACTOR

#### A. Figure 1. "Alarm Setup Screen"

This screenshot allows you to set all **Alarm Set Points** for the Particulate, lodine, and Nobel Gas Chambers.



#### B. Figure 2. "lodine Calibration Screen"

KABTECH Realtime VISIONpro - scr18	
File Edit Tools Objects Options Mail Colors Font User Help	
$ \begin{array}{c} \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet \\ \bullet & \bullet &$	
CALIBRATION PROCEDURE (IODINE CHANNEL)	ON
STEP 1: MAKE SURE THE SINGLE CHANNEL IS ADJUSTED PROPERLY FOR THE ISOTOPE.(SEE MANUAL) 0 10 FIND BACKGROUND COUNTS. B.G. COUNTING TIME(MIN) B.G. COUNTING TIME(MIN)	COUNT START BUTTON
SET THE B.G. COUNTING TIME ON THE B.G. COUNTING TIME KNOB. CLICK-HOLD AND DRAG THE KNOB INDICATOR TO THE DESIRED VALUE START B.G. COUNTING BY SETTING B.G. COUNT START BUTTON TO "ON". CLICK-HOLD THE MOUSE POINTER ON THE BUTTON.	
STEP 2: FIND SOURCE COUNTS B.G.COUNT	rs/MIN
PULL OUT THE IODINE FILTER CARTRIDGE HOLDER. REMOVE THE FILTER CARTRIDGE. INSTALL THE CAL SOURCE WITH THE SOURCE HOLDER INSTEAD OF FI RE-INSERT THE FILTER CARTRIDGE HOLDER ALL THE WAY INSIDE THE BIG SHIELD UNTIL IT STOPS. SET THE CAL.STRENGTH ON THE SLIDER BELOW BY PRESSING THE SHIFT AND DOUBLE CLICKING THE MOUSE POINTER ON THE SLIDER. A KEYPAD WILL AF ON THE SCREEN. CLICK ON THE KEYPAD DIGITS TO DISPLAY THE NUMBER AND PRESS ENTER TO ACCEPT IT. SOURCE STRENGTH SHOULD BE AT LEAST 10 THEN START SOURCE COUNTING BY SETTING SOURCE COUNT START BUTTON TO "ON". CLICK-HOLD THE MOUSE POINTER ON THE BUTTON. THE PROGRAM LOOKS AT 20 SAMPLES OF 30 SEC. COUNTS AND PERFORMS A STATISTICAL TEST. IF IT PASSES, IT CALCALCULATES THE CONVERSION FA IS STORED IN A FILE TO BE USED IN THE MAIN PROGRAM. THIS TAKES ABOUT 10 MIN. IF IT FAILS, THE PROGRAM CONTINUES TO CHECK CONSECUTIVE 20 ANOTHER 10 MIN. IF THE TEST PASSES THE PROGRAM LOGS IN THE CONVERSION FACTOR. OTHERWISE THE PROGRAM STOPS AFTER 22 MIN. WITHOUT ST THE CONVERSION FACTOR. THE PROBE AND THE ELECTRONIC MODULE HAS TO BE CHECKED OUT.	PEAR ,000Bq. .ctor. (Counts:Bq) SAMPLES FOR
Bg: 3700.00	FF START BUTTON
0 50000 FEFF_cps/Bq PAS	SED CAL TEST
	LED
Start C:\WINDOWS\syste 🍟 untitled - Paint 🛄 LABTECH NOTEBOOK 🃂 LABTECH Realtime VI	🔦 🍓 1:31 PM

This screenshot Displays and Finds both **Background** and **Source Counts**. It is also able to Measure ant set Parameters.



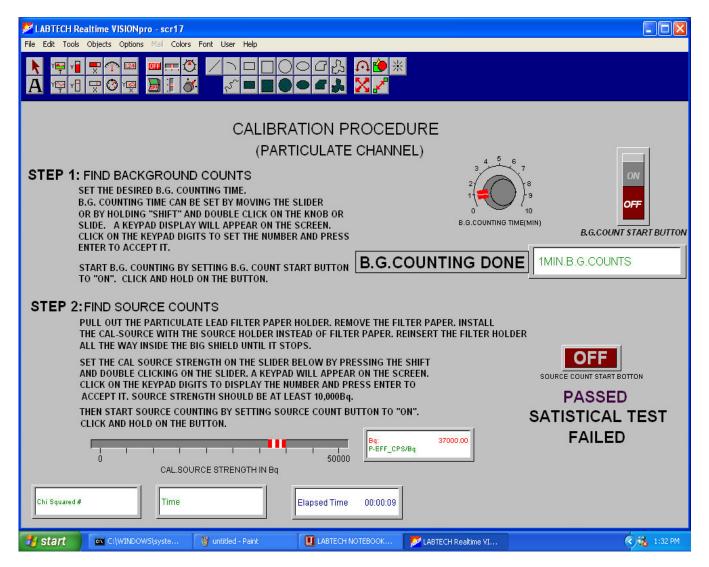
### C. Figure 3. "Nobel Gas Calibration" Screen

LABTECH Realtime VISIONpro - scr21						
File Edit Tools Objects Options Mail Colors Font User Help						
CALIBRATION PROCEDURE (NOBLE GAS CHANNELS)	GAS-1DET.C/MIN GAS-2DET.C/MIN					
STEP 1: FIND THE BACKGROUND COUNTS. MAKE SURE THE NOBLE GAS CHANNELS ARE ADJUSTED PROPERLY FOR THE ISOTOPE. (SEE MANUAL) SET THE B.G. COUNTING TIME ON THE B.G. COUNTING TIME KNOB, CLICK-HOLD AND DRAG THE KNOB INDICATOR TO THE DESIRED VALUE. START B.G. COUNTING BY SETTING B.G. COUNT "START BUTTON" TO "ON". CLICK-HOLD THE MOUSE POINTER ON THE BUTTON.	3 4 5 6 7 8 9 0 0 B.G. COUNTING TIME B.G.COUNT START BUTTON					
<ul> <li>STEP 2: DISCONNECT THE INLET AND OUTLET HOSES FROM THE NOBLE GAS DETETECTION SHIELD AND RECONNECT THEM AS PER NOBLE GAS CALIBRATION DRAWING IN THE MANUAL.</li> <li>INJECT CALIBRATED AMOUNT OF XENON-133 GAS INTO THE SYSTEM. YOU WILL NEED TO KNOW THE SOURCE CONCENTRATION (Bq/cc), CHAMBER VOLUME (LITERS) AND THE PRESSURE () OF THE INJECTED XENON TO CALCULATE THE SOURCE STRENGTH IN (Bq/cc). AFTER INJECTING THE XENON SAMPLE INTO THE SYSTEM, CLICK ON THE "MIX INDICATOR" BUTTON. WHEN YOU OBSERVE THE "MIXING IS COMPLETE!" MESSAGE, CLICK OFF THE "MIX INDICATOR" BUTTON AND PROCEED.</li> <li>52Bq/cc AS SOURCE STRENGTH.</li> </ul>						
STEP 3: ENTER THE YOUR CALCULATED SOURCE STRENGTH ON THE S BY PRESSING THE SHIFT KEY AND DOUBLE CLICKING ON THE KEYPAD DIALOG WILL APPEAR, ENTER THE VALUE THEN PRES ACCEPT IT.	SLIDER. A OFF WITKING IS COWPLETE!					
IF CHECK SOURCE IS USED AS CAL.SOURCE ENTER         13Bq/cc AS SOURCE STRENGTH.         13Bq/cc AS SOURCE STRENGTH.         0         CAL SOURCE STRENGTH IN Bq/cc         GAS-1DET.         GAS-2DET.	CALSOURCE START BUTTON					
🐉 start 🛛 🖾 C:\WINDOWS\syste 🦉 untitled - Paint 🛄 LABTECH	I NOTEBOOK 📂 LABTECH Realtime VI					

This screenshot displays **Background** Counts found through the **Nobel Gas Chamber**. **Background and Source Count** time is adjusted here as well.



### D. Figure 4. "Particulate Calibration" Screen



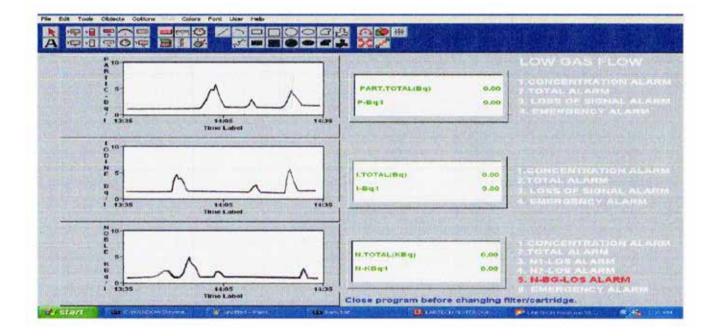
This Screenshot displays **Background and Source** counts Found through the particulate Chamber. **Background and Source Counts** are adjusted through this screen.



E. "Check Source" screen Not Shown

**F.** "FM Graphs" screen Not Shown This creates Trend Graphs of most recent 7 Day, 30 Day and 1 Yr Readings

G. "InstaCal Start Up" screen Not Shown

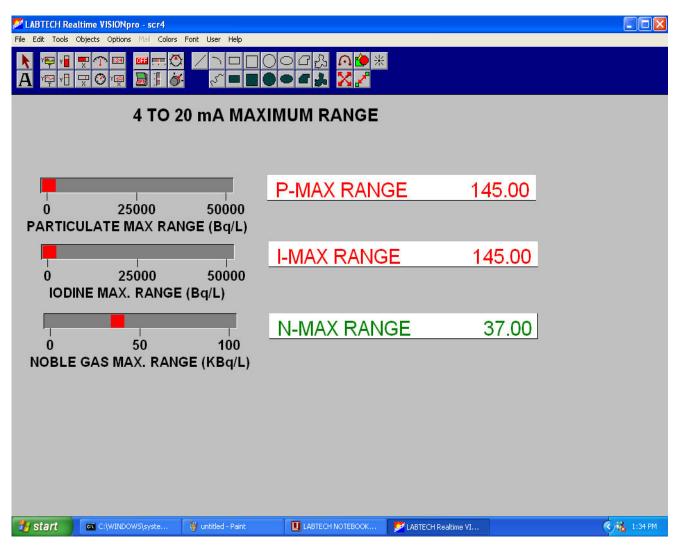


This Screenshot displays the **Particulate**, **Iodine**, and **Nobel Gas Chamber** system main functions:

- **1. Realtime Airborne Concentration Three Channels**
- 2. Total Daily Release All Three Channels
- 3. All Data Archived to Disk every 2 minutes



### I. Figure 5. 4 to 20 mA Setup Screen



This screenshot displays the **4 to 20 mA setup** for the **Particulate**, **Iodine**, and **Nobel Gas Chambers**. The maximum ranges for each chamber is adjustable as shown above.

**J. "Batch File" Not Shown:** Controls Daily 24 Hr. midnight turn over Reset of data and daily release Totals.



### K. Figure 6. "Test" Screen

🗾 LABTECH Re	altime VISIONpro - scr11				
File Edit Tools	Objects Options Mail Colors	Font User Help			
★ *₽ *■ A *₽ *■				<mark>′●</mark>	
	PARTICULATE 0.0	00	ON OFF PARTICULATE ALARM	ON OFF PARTICULATE LOSS OF SIGNAL	<b>TEST PROGRAM</b> This program helps to troubleshoot the hardware. The counters read the raw counts in minutes. The check source when activated will give counts on all channels. To check alarms click and hold on the on-off buttons.
	NOBLE GAS_1 0.0	_	OFF IODINE ALARM	ON OFF IODINE LOSS OF SIGNAL	
	BACKGROUND 0.		ON OFF NOBLE GAS ALARM	OFF NOBLE GAS LOSS OF SIGNAL	
背 start	C:\WINDOWS\syste	🦉 untitled - Paint	LABTECH NOTEB	OOK 🏏 LABTECH Realtime VI	🚫 🔥 1:29 PM

This Screenshot displays the various sections of the system that are tested for troubleshooting or simply confirm they are working properly. They can be activated singly or all together for testing.

